THE

Wisconsin Journal of Education.

VOL. IV. NOVEMBER 1859. NO. 5.

THE HONOR OF OUR CALLING:

ITS NATURAL AND ACQUIRED CHARACTER—THE OBLIGATIONS IMPOSED UPON US.

Continued from the September Number.

So we look for grapes and find wild grapes—instead of the educator, find the lad that should only hold his candle. The teacher's chair is occupied by those who are guided by no special training, marked by no natural aptness. In the Old World the youth that learns a craft must, under a guide, experiment upon useless material. We permit youth, without a guide, to learn to teach by teaching; to experiment upon our children; to "teach the young idea how to shoot," while they themselves yet aim and shoot with the eyes shut; who feel as much out of place as an awkward boy with his first quill, in his first attempt with the carpenter's adz, or a woman throwing stones.

Still, money thinks such fit to keep school, and engages such to tattoo the immortal face, to stick the immortal soul full of poisoned arrows, ever to fester and bleed.

A man of experience is sought to fit a shoe; a skillful man, a trained man, to fit a garment for the body; but the young, who have merely seen others clothe their minds, are deemed able to pin fig leaves together to cover the shame of ignorance. Could we but behold the intellect grown up under such awkward, skilless guides, we would see a visage branded and tattooed worse than the wild African; it would appear like a wall built by a blind man, or the garden of the sluggard.

But the true, the real school master is abroad, and may be found, though he walks in other circles, and mingles in other pursuits, and wanders like birds driven from their nests by evil birds. John and Judas

appeared alike to those who weighed not with spiritual scales ; so men fitted by nature for the various callings, appear alike to those who weigh not with the philosopher's scales, while they are as unlike as the pebbles and the sand.

As the machinist prepares each piece, bolt, and screw for its place, so nature adapts men to their various occupations : the shepherd with his hook is at home with his flocks; the farmer with his plow; the mechanic with his planes; the merchant with his goods; the physician with his lancet; the lawyer with his client; and no less, the teacher with his pupil. God has not forgotten that which is most needed. The peculiar natural fitness of a teacher appears in a full and even organization; and to a certain extent, he would be adapted to any place; for he must, in a measure, be able to educate others for every place, and he leaves his own impression upon his charge. Many that hold the teacher's wand feel and act as much out of place as fishes in air, or birds in water; they look as anxiously for the end of a term as an ill child for the end of a weary night. But diffidence in the school-room, weariness of teaching, ill success in the calling, do not always foreshadow a lack in natural gift. Nature's songsters do not all sing, nor her musicians all play upon instruments ; all must be taught.

We cannot here enter into an argument to show the necessity of training schools for teachers. Let us, however, assert what has actually proven true : that pupils, while studying, no more learn to teach, than children by eating bread learn how to bake it, or a lad who sees a tailor cut and make a garment, learns the trade. All teachers should learn to teach under instructors.

In addition to such natural and acquired qualifications, there should be promoted that interest in the cause, that love for its advancement, which is engendered by a dedication to the calling. Thus, we would secure a new profession which, at least, should be equal to, if not in advance of all others.

In this we ask what we ought to have, not what we expect to obtain at present. Unless we strive we certainly shall not conquer ; unless we labor, we shall die as we have lived. We must demand what we need, and get what we can. We do not expect to ascend, like a balloon, with rapid motion, but like the growth of the oak. We are too free for a sudden reform. When the king is one, reforms may be rapid; but when every man is a king, reforms and great changes must move on with the mighty tide, and come with the elevation and enlightenment of the public mind. Public opinion is proverbially slow, especially in reforms: but we have no right to hide behind our faults, and make a virtue of sloth. It is our duty to stand in the front ranks, and hasten forward with that persevering spirit which never loiters nor yields till the victory is gained. We have exceedingly great obstacles to overcome ; and if the Prince of the House of Persia withstood the angel one-and-twenty days, we shall be

withstood one-and-twenty years. As a generation of Israel died in the wilderness, so must we wait and die before the promise fully comes. We must commence our work with self examination and improvement.

In olden times leaders were teachers, and teachers were the leaders of the people. In Israel, prophets were instructors; in Greece and Rome, their great men. Nations never became elevated above their teachers. But the times have changed. The spirit of freedom has opened the way for self culture. The man has a right to the throne who first reaches it. The world to the world lies open, and all men are invited to strive for the palm. The swift no longer wait for instructors, and, unless instructors rise with the flight of the world, pupils, by the aid of books, rush up the hill, and leave them in the smoke and fog at the base. Formerly teachers lead the people through life, and their *ipse dixit* was the end of dispute; but now, lads of twelve, who have idled away more than half their school days, often strike out, pass their teachers, and leave them to paddle on in their wake, while there is no *ipse dixit* this side of Heaven in which they deign to acknowledge any confidence.

The people begin to see with their own eyes, and judge for themselves. The more they are educated by teachers, by self culture, and by experience, the more they see the emptiness of a one sided education—the fault of our general system. They see that teachers often possess little more knowledge or skill than those under their charge. Every man and woman, therefore, feels perfectly competent to direct; and as none of them, neither patron nor teacher, are competent to direct in matters of education, there, of necessity, will be as many opinions as people, and the teacher, especially, will find himself standing on live coals. The people have discovered that he who gathers together a few elementary principles of science; who runs as he reads, and reads as he runs; who has digged a stone out of a mountain, hewn a stick of timber, laid up a stone wall, faced a winters storm half clad, struggled with want, mashed his fingers with a stone hammer, unnailed his toes with a beetle, been buried under a load of hay, thrown over the cart-wheel into the mud, kicked by the world and gored by hard fortune; they have seen a youth thus educated undertake life's battle with the collegian, and win the prize. They have seen the one strong and vigorous, and the other feeble; they have buried one in the meridian of life, the other in gray hairs; they have seen one everywhere a practical man, and at home everywhere, and the other lost if but off his line; they have seen the one kill a bear before the other could bethink himself to run; mid terrors, and troubles, and billows, and storms, and battles, they have often seen the man schooled in the school of real life and action out hero the collegian.

Our colleges, our common schools, and our high schools must be improved, and our teachers elevated, else the common people will rise above us and tread us down, and we shall neither receive nor merit honor. What we do is rarely well done, and what is well done is of little use for

want of more. An eye, without the pupil, is useless; a single bolt taken from a steam engine might render the whole useless; so a man, with a mighty intellect stored with all science, is but a wreck. On every side we behold the want of completeness of culture, and everywhere the crooked tree tells of a crooked twig. Tattered clothes, shattered walls, and weedy, thorny gardens show ill culture. The imprint of a man in the mud of a ditch; the dens of drunkennes, debauchery, and ill-fame; mathematics and sensuality without sense; heads without eyes and bodies without hearts, all show that youth is not trained in the way it should go.

Let us cast our eyes upon the great panorama of the world. Here is a picture of shy, lean, haggard poverty, lingering with her ignoble progenitors, sloth, drunkenness, and gluttony, all foul children of an evil school. Here is grim, ghastly, ghostly Disease, nourished by ignorance and evil habits, leading the pale horse. Here is company of giddy youth, full of rioting and profanity, blind with sensuality, confident in the hope of materialism; running swift in pursuit of the foolish woman, as fools to the correction of the stocks; they know not that the dead are there, and that her guests are in the depths of hell; there are mothers weeping over the erring, and fathers, whose gray hairs come down to the grave in sorrow, lamenting the evils that have bereft them of their children, and put out the light of hope; there, among the gloomy crags, in the deep shade, in slimy pits, in dark, gloomy, haunted caverns, when closely pursued, flees the burglar, the incendiary and the assassin; here they hide their illgotten gains, and secrete their implements of wickedness. Here are the ashes of the Christian martyrs; there the blood of patriots; these are tyrants that triumph over the spoils of the innocent; those half clad laborers are slaves; here are idolators; here are they that deal in men's souls, and make merchandise of the weak; these are politicians, exhibiting to the people large advertisements, bearing upon the outside retrenchment, reform, and liberty for all, while upon the inside are a school of fishes, a gold-headed cane, and silver plate; there is a tumultuous mob, and yonder the smoke of a terrible battle; there horses stand in blood up to their bridles, and widows and orphans fill the earth with mourning.

The ancient world tells that what is, has been. The rude heaps of crumbling, dingy, time-worn walls, the massive broken columns, the moss-covered towers, the ivy-grown palaces, the pyramids and fallen idols, tell that myriads sleep who were struck down by the bolts of the Almighty for the very sins that rest so heavily upon us. Each nation that has past has looked upon its own greatness, and blessed itself with the cheering words, "This kingdom is without end." We cherish the same idea, that we are a most extraordinary people, a people of wonderful progress, whose course is onward and upward without bound; but still the same mighty hand rules, and the same curses and blessings are placed before us. The last words of that book of books that hath stood while nations have been scattered and laid in ruinous heaps, and that, although heaven

and earth shall pass away, shall stand, are ominous words: "Behold I will send you Elijah the prophet before the coming of the great day of the Lord, and he shall turn the hearts of the fathers to the children, and the hearts of the children to the fathers, lest I come and smite the earth with a curse." Considering these things, what is befitting? Can a people be moved that these truths will not move? Is there motive enough in all this to arouse us? To whom shall we entrust our children? To whom our happiness, our homes, our liberties, our institutions, our lives, and our great nation? If there is a wise man on earth, let him be sought for an educator of youth.

We doubtless feel the heavy burden that rests upon us. In our experience we have learned that children care but little for their own elevation; it is not in the nature of things that they should. We have seen, too, that parents care but little; for, if it is true that men go where their hearts are, it can be no less true that parents' hearts are not in the schoolroom. Again, we have learned that those who live among us, who are neither parents nor guardians, care only to see the gulf, that, as they say, swallows up their riches, swept away.

Again, therefore, we say that we must apply ourselves to self-examination and self-improvement.

The teacher must be a physiologist, that he may prune the youthful stalk and ward off disease, and cultivate vigor and life in the clay house of the soul. It is his duty to give his pupil a knowledge of the demands of the physical nature, and send him out into the world, not a decaying skeleton, but a *man*, rejoicing in strength and symmetry. We are too apt to pursue one motive, or idea, to the neglect of all others; but this leads to insanity; so doing, we pursue the way of the monomaniac. One nation cultivates merely the animal, another the mental, while, indeed, few individuals, even, have equally developed the animal, mental, moral, and spiritual. All experience shows that as a body without a head, a head without an eye, or an eye without a pupil, so is man, deprived of any of his component parts.

The teacher must be a metaphysician, and, as far as possible, understand the length, breadth, and depth of the intellect, and the hidden powers of the soul. He must understand human nature, and the human character. How can a man build that which he does not comprehend, or cultivate that whose nature he does not know! We would not trust a child to manage a steam engine, because he lacks in judgment, and knows not the power and action of the machinery; we would not trust a land lubber with the helm of a ship in an ocean storm, for his want of knowledge; but the child can as well guide the engine, and the land lubber the ship, as the untutored mind the mind.

Every teacher should be a moralist and theologian, and posess a heart in which morality—pure Christian morality—is established in the love and favor of God. The school that is wanting in the influence of such a heart

is without the vital spark. We ask not for sectarianism,—it is the bane of true morality and religion; neither do we ask for that moral instruction or religion that comes only in the cold, formal prayer. It is that religious morality which acts in every action, breathes in every breath, lives in every life; that which, from its abundance in the heart, flows in every vein, and lends its sweet and benign influence all around, that should adorn the teachers instruction; nor should the word of God or prayer be wanting. The teacher has almost an ever-ready opportunity to instruct children in the wisdom and goodness of God. When he speaks of the structure of the organs of speech, and the various sounds of the human voice; when he exhibits the symmetry, strength, and manifest wisdom in the human frame; when he points to the trees and their green leaves and fruits, to the corn and grass, vines and flowers, beasts, birds, fishes, and insects, to the mountains, rivers, seas, and winds, and to all that glitters below and above, how can he refrain from pointing with delight to the God that dwells in all. Let it be thought that children may live and enjoy life, eating bread only during one year, and only drinking water the next, and so on, alternating; but let us not hope for anything but tares, cheat, moral death, and miserable blight, while stuffing the body summers, the mind winters, and the heart Sundays.

He that opposes moral and religious instruction in our schools, is a virtual enemy to himself, to the world, and to God. When the world is fully enlightened it will thrust such an one from society, even as Vulcan was thrust from Heaven for defending wickedness.

It has been said that Nature will do her own work; truly, she will; but what God demands of man she will never do. She will not cultivate fields nor gardens; she will not clothe us as other animals, nor feed us as she does other animals, nor teach us as she teaches other animals. There is a work left for us, and we must do it. She does her work well where God commands. She makes beautiful flowers in the field, beautiful leaves in the grove; her bow is more glorious than all the works of man; her storms more terrible than war; her rocks and mountains more magnificent than temples. But nature's covering for a house is shaggy moss; her garden is full of weeds and briars; her fruit is sour; her men Indians and Hottentots. What God demands of men, she will not do.

"I owe my success in life to one single fact, viz.: that at the age of twenty-seven I commenced, and continued for years, the process of daily reading and speaking upon the contents of some historical and scientific book. These off-hand efforts were made sometimes in a corn field, at others in the forest, and not unfrequently in some distant barn, with the horse and ox for my auditors.—*Henry Clay.*

MORAL INSTRUCTION IN SCHOOLS.

(*Continued from the October Number.*)

THE State demands that its future citizens be morally educated. The teacher is to educate citizens, to prepare them for honorably discharging their responsible duties. The character of our government, the maintenance of our free institutions, depend upon the education of the youth of our country. It has been well said that the people of this great republic have no more native and inherent ability to exercise wisely the privilege of voting than they have to predict without instruction, and yet with unfailing precision, the return of a comet, or the occultation of some bright star in the heavens. On this subject the testimony of history is uniform; corrupt the morals of a republic and you overthrow its government. Already the true patriot has reason to apprehend danger to our free institutions. The astounding developments of political corruption which the last few years have revealed, both on the part of Congress and of our State governments, loudly call for reform in the moral character of politicians and governmental officials. If with the increase of intelligence the morals of the State wane; if men will discriminate between public and private right, and scorn to steal a farthing from their neighbors, but filch from the public treasury with not only unblushing effrontery, but with impunity, then disaster and overthrow surely await our republic. And yet, with all the cheating and dishonest means employed for the acquisition of wealth; with the early development in the child of the spirit of enterprise, and the appliances brought to bear upon him to awaken his cupidity, with the magnificent schemes of public swindling conducted before his eyes by those who enjoy the the highest trusts in the gift of a free government; with those influences bearing constantly upon him, how can we expect political integrity and moral honesty of our future citizens unless such influences be counteracted by a thorough system of moral instruction.

Although a cultivated mind is less likely to become immoral, yet no mere intellectual culture is sufficient to guard against these tendencies. The moral tendency of intellectual cultivation may be overcome by temptation to vice; and no more effective argument can be used against public schools than that crime and immorality increase among the educated. The moral nature must be developed and cultivated equally with the intellectual, or there can be no security to public morals.

Finally, the individual himself demands a moral education. Manhood and old age will hold the teacher responsible for the moral education of youth. The severest malediction that can fall upon the head of a poor mortal is that of a betrayed, deceived disciple upon a false or neglectful teacher. It is said that old age is a second childhood in moral habits and temptations as well as in physical ability, and that old men sometimes dis-

grace a long manhood of honorable conduct by falling into vices or follies which belong to the waywardness of youth. We all know that the scenes and events of younger years remain faithfully and minutely depicted upon the memory of the aged when after events and recent occurrences are quite forgotten. When, therefore, all the memories and emotions of youth come rushing in their freshness back upon the mind enfeebled by age and shorn of the strength of manlier years, what wonder, provided all the moral discipline was acquired in later years, and has again been lost, if the youth was undisciplined and immoral; what wonder that even old age again falls into the vices and follies of youth. What a bitter cup, then, are those teachers pouring out for declining years, who habitually neglect to teach and train the children of their charge in habits of discretion, and to cultivate and strengthen their moral character.

But the more we can cultivate moral self respect, the more do we elevate the human character; and the man has a right to expect moral culture and discipline from the teacher of his youth.

It remains to indicate the ground to be covered by moral instruction, and the best method of imparting such instruction. There are two preliminary considerations worthy of remark :

Firstly. Attention must be bestowed upon the bodily health of the student. All instructions will be in a great measure lost upon a mind inhabiting an unsound body; and hence, systematic attention to the physical health and development of the child is preliminary to all other means and kinds of education. If the men of our day could be brought up in the simple and healthy habits of the early settlers of New-England, a vigorous posterity would repeat the blessing upon us which we pronounce upon our ancestors. Says Bancroft: "One might dwell there from year to year and not see a drunkard, or hear an oath, or see a beggar. The consequence was universal health, one of the chief elements of public happiness. The average duration of life, compared with Europe, was nearly doubled; and the human race was so vigorous that of all who were born into the world, more than two in ten, full four in twenty, attained the age of seventy; of those who lived beyond ninety the proportion, as compared with European tables of longevity, was still more remarkable." Nothing is more certain than that a sickly, effeminate physical development is directly in the way of moral as well as intellectual culture.

Secondly. The habit of idleness must be overcome. A large share of the time is spent by nearly all the younger, and many of the older pupils, in looking around the school-room, or other inattention. Now, while this is itself immoral, as a waste of time, and hence, to be treated as a moral disorder, still its cure is preliminary to a desirable progress in any direction. As has been already remarked, but a small portion of the pupil's time, will or can be devoted to the study of his school books; it becomes the teacher's duty, then, to furnish the mental activities of his scholars with appropriate and sufficiently varied subjects of thought, and also to

ascertain as far as possible the general tendency of the mind of each student. The child must be made to feel that in the brief period allotted to him to prepare for the duties of life, he has no time, no right, to be an idle spectator. Says Lord Bacon: "Man must know that, in this theater of man's life, it is reserved only for God and angels to be lookers on," and this sentiment must be instilled into the mind of every child; and generally, the object to be constantly brought into view is independence, personal, intellectual, moral. The sooner the character can be so strengthened that the child can exercise moral self-control the better.

An education of this kind "by its discipline," says Bishop Potter, "contributes insensibly to generate a spirit of subordination to lawful authority, a power of self control, and a habit of postponing present indulgence to a a greater future good; and finally, by the knowledge which it communicates, it enlarges a child's conception of his true interests, and teaches him that forecast, self restraint, and a correct moral deportment, are indispensible prerequisites to success in life. The same effect must follow, in a much higher degree, when intellectual instruction has been combined with proper moral culture." On the ground to be covered by these moral instructions, the following partial conspectus is made up from Hickok's Rational Psychology, and must be varied as to extent and subject matter, by each teacher's peculiar circumstances. The teacher may well begin with the first grand department of ethics:

First, Pure Morality.

The three conditions of all virtue should be thoroughly explained and enforced:

1. Pure mindedness.
2. Decision of character.
3. Independence.

Then may be taken up the first topics under Pure Morality,

I. Duties to mankind; and we may consider as the first of these the Personal Duties, dividing themselves into two distinct classes;

(*a*) Self control. The teacher will have constant occasion to illustrate and enforce this duty. It may be variously subdivided as follows: Self protection, as against maiming, self-torture, suicide, and in favor of self defence, and the proper control of the body—which excludes intemperance, licentiousness, ambition and covetousness; also a control of our spirit, which is opposed to servility, vanity, jealousy, and false honor.

(*b*). Self culture, including complete self development, as follows:

1. Physical growth; under which should be treated diet, dress, exercise, cleanliness, etc. After these personal duties may be considered

2. Growth in experimental knowledge; excluding stupidity, heedlessness, rashness, credulity, scepticism, and fatality, or destiny.

3. Growth in rational wisdom; including taste, science, morality.

The relative duties may be taken up under two divisions, as,

(*a*). Kindness; comprehended under the general maxim: Do good to all, as ye have opportunity. This division will include instructions

1. On Indebtedness, under the maxim, Owe no man anything; embracing the following subjects, viz: honesty, reciprocity, monopoly.

2. On Benevolence, in the form of giving to the poor. Under this head will be treated charity, obduracy, sentimentality.

3. On Thankfulness, including gratitude, innocence, and peevishness. The second division is

(*b*). Respect; including courtesy, opposed to arrogance, scorn, ridicule and vulgarity.

We have, perhaps, sufficiently indicated the outline by the subjects given under Pure Morality. Of course each teacher can carry out for himself the remaining topics, and form a similar scheme under positive authority, including civil, divine, and parental government. Or a different conspectus can be arranged from any other system of ethics, or by the teacher himself. Still it strikes us that some definite system will be necessary in this, as well as in every other department of education.

Lastly. As to the method of instruction. It will be evident by a glance at some of the topics mentioned, that frequent opportunities cannot but but occur for imparting these moral lessons, as well as ample material for illustration. Take, for example, the subject of diet, or physical exercise.

We cannot conceive of any position where a moral teacher has a better opportunity, or a fitter audience for imparting instruction in these subjects, than the schoolmaster possesses. All the ordinary rules of Hygiene and exercise can be given. The consequences of surfeiting and drunkenness, of unwholesome diet, and all excesses, can be shown, and almost daily illustrated, until the children, and, in many cases, their parents, will, from both moral and prudential considerations, adopt better, if not correct habits. The skillful teacher will find apt illustrations continually presented, both among his pupils and in the community.

The first, and not least important means of instruction which the teacher must use, is example. The teacher himself should possess correct moral habits, or all his teaching will prove worse than useless. Says an eminent educator, "I cannot dismiss this subject of moral education without adverting to the great insensibility which seems to prevail among us in regard to the power of example. What meets the eye always sinks deeper into the mind than what only falls upon the ear. This is peculiarly the case with moral instructions."

Secondly, the teacher must depend much upon repetition. The same lesson is to be reviewed, and presented under different aspects, until no doubt remains that it is fully mastered. In case of small children, moral precepts and maxims should be committed to memory; and here we may be allowed to venture a suggestion, that the reform in the logical method of teaching has been carried quite too far. Children can learn memoriter long before the reasoning faculty is developed; and the system of instruction which ignores that fact must be defective. While the memory is so retentive,

and the child learns by mere curiosity, it seems highly desirable to encourage him to commit to memory literary gems of our language in prose and poetry, and also to store the mind with moral precepts, although the child may, for the time, fail to appreciate the beauties of the one or the extent of the other.

The precise time when the reason should be principally employed, and a philosophical memory cultivated, it is impossible to determine. Perhaps nature furnishes the best guide in the ever increasing inquisitiveness of the mind. Doubtless, every desire to ascertain the "why," should be sedulously encouraged, and thus the mind be conducted naturally from facts up to their causes, keeping constantly in view the notable motto of Erasmus, that "at first it is no great matter how much you learn, but how well you learn it."

Thirdly, the teacher must use books as aids and for illustration, "as consuls to guide, and not as dictators to command." The remark just made on committing to memory, does not apply to the teacher, who should in every instance be enabled to give a reason for his faith. The less a teacher has to do with books, when giving instruction on any subject, the better. He ought, generally, so to master the lesson he assigns to his pupils, that he can hear the recitation and teach the class without referring to his book. It always seemed unfair for the teacher to turn to his book in the recitation, and not allow the class the same privilege. Again, there should be system in the arrangement of the subject matter, and then the teacher should insist on the same attention and thoroughness in his oral lessons, as in those assigned from a book; there should be similar reviews and examinations, until the subject under consideration is thoroughly understood. The necessity for brevity in imparting oral instructions, frequency, and a wise selection of time will readily suggest itself to the experienced teacher.

In the necessarily limited and imperfect view which has been presented of this important subject, the sole object has been to awaken some interest in the department of oral instruction, and especially as connected with moral culture. If indifference and neglect, if bad instruction and worse example will bring down upon the head of the recreant teacher the maledictions of his former pupils, when in after years they are compelled to reap the bitter fruits of such teaching, what, on the other hand, may not those expect who, with toil and with tears, sow the seeds of virtue and religion in the young heart. How will manhood cherish the memory, honor and revere the character of him who instilled the principles of truth and holiness into the child's receptive nature. How will old age, when the panorama of youthful days and early experience passes and repasses upon the lessening canvass of life, pause at the faithful picture, the dear remembrance of some quiet school-room, where the placid teacher of his own boyhood, with hand resting softly upon the head of his pupil, gently chided him for some "youthful folly, born more of rash-

ness than of turpitude"; or, with glowing pathos, pointed out to him the better way of life. Ah! The old man will weep tears of gratitude and benediction when he recalls the features, the voice, and the holy lessons of such an instructor. Think you the virtues of such teachers will die with them? Oh, no! When their memory has ceased to be cherished upon the earth, and the spotless snows of winter, and the fragrant roses of summer have alike adorned their peaceful tombs for generations; when we can no longer trace the blessed influence of their lives and character back to its source, still that influence, like the waters of the Nile, will ever flow on, causing the seeds of virtue in other hearts to germinate, everywhere dispensing blessings in its course, and none the less so because its source is hidden and inaccessible.

Teachers of Wisconsin, whether you go down to your graves, after a long life of usefulness, full of honors, blessed with the comforts of this life, and surrounded by dear friends and ministering angels, or die in poverty, alone and neglected, the consciousness of having, in your lives, and by your labors, not only made men wiser, but better, shall yield you more satisfaction than wealth or friends, shall smooth your dying pillow, sweeten the bitter cup that all must drink, and future generations shall rise up to call you blessed.

LINES:

TO MISS M. L. H., OF CHARLOTTE, VT.

It is twenty years ago, Mary,
As sure as I am alive,
(If it were not for making us so old,
I 'd call it twenty-five,)

Since up the hill, and down the hill,
And through all sorts of weather;
Through heat, and dust, and rain and mud,
We went to school together.

How have things changed since then, Mary?
Is the school house standing still?
Do children yet, with merry shouts,
Chase each other o'er the hill?

Do the squirrels sport in the beach-woods?
Do the robins cherily sing
As they used to in the grape-vine bowers
Where we were wont to swing?

O! could we meet again, Mary,
We 'd recall the days long fled;
We 'd talk of the school-mates changed and gone,
And the school-mates who are dead;

And of the teachers who essayed
To lead us up the hill
Of science; though, to speak the truth,
I 'm near the bottom still.

The fault, perhaps, was all in me;
Perhaps a little bit
In those who "trained my young ideas
To shoot," but not to hit.

But ah! good honest souls were they,
And not a whit to blame.
For they were trained by teachers
In science rather lame.

But, of a different kind was she,
The wonderful Miss "Hanner,"
Who came to startle our rustic world
With her French, and her "Pianner."

But, had she taught us 'til this day
In her odd way, I fancy
'T would make a wild Canadian laugh
To hear us *parley Francais*.

Now don't get nervous, Mary dear,
And I will say no more
Of that old prison, which years ago,
We voted such a bore.

Too freshly, even at this late day,
My memory recalls
A vision of its benches rude,
And smoked, and battered walls.

"Peace to its ashes;" long ago,
Dear friend, I humbly trust,
Like all things mortal, that old hut
Has mouldered back to dust.

If I go into raptures,
  It will be about the hours
We spent in wandering through the wood,
  Seeking the sweet spring flowers;

Or, when the summer days were bright,
  We watched the sunbeams quiver
Through the long willow boughs that hung
  Above the gleaming river;

Or whiled away the pleasant hour
  Beneath the old elm tree,
Dreaming out a golden future
  That never was to be.

But we will never grieve, Mary,
  For the days that come not back;
For who would wish to tread again
  Life's rough and weary track?

We left not all the good behind,
  For sunshine still is ours;
And round our pathway cluster still
  Life's sweetest, rarest flowers.

So we 'll carry brave and cheerful hearts,
  Wherever we may roam;
Knowing that each day's dusty march
  But brings us nearer home.

C. L. M.

Submission.—Dr. Johnson used to say, that a habit of looking at the best side of every event is better than a thousand pounds a year. Bishop Hall quaintly remarks: "For every bad there might be a worse, and when a man breaks his leg, let him be thankful that it was not his neck!" When Fenelon's library was on fire, "God be praised," he exclaimed, "that it is not the dwelling of some poor man!" This is the spirit of submission,—one of the most beautiful traits that can possess the human heart. Resolve to see the world on its sunny side, and you have almost won the battle at the outset.

A DEVELOPMENT OF THE FUNDAMENTAL NOTIONS OF GRAMMAR;

BEING AN INTRODUCTION TO BECKER'S SCHOOL GRAMMAR.

No. V.

Translated and Modified for the Wisconsin Journal of Education.

SENTENTIAL RELATIONS.

§ 16. Every sentence consists only of the *subject, i.e.*, the notion of a *being*, and the predicate, *i.e.*, the notion of *activity*, which is predicated of the being. (§ 2.)

The sentence may, however, take up into itself manifold notions in manifold relations. A notion of activity may be related attributively to the notion of the being, or a notion of a being, objectively to the notion of activity. (§ 11.)

Ex.—The *thirsty* boy drinks *water*.

Every notion-word, and even a form-word, which only denotes a notion, becomes, in speech, a *member of the sentence*, inasmuch as its notion is subject or predicate, or stands in a relation to the subject or predicate.

The predicate is the *principal notion* of the sentence, and the word which expresses the predicate, is the *principal word* of the sentence. The subject is subordinate to the predicate. We call the notion of the subject the *relational notion, i.e.*, the notion to which the principal notion is related; and that word which expresses the subject is called the *relational word*.

Just so in the *attributive* and *objective* relation: one notion is principal and the other subordinate; and that word which expresses the principal notion, the principal word. We call that notion to which the attribute or object is related, the *relational notion*, as the expression of it the *relational word*.

We call the union of two notions, which, as principal notion and subordinate notion, stand in relation to one another, a *sentential relation*, and distinguish three kinds:

(*a.*) The *predicative*; *e.g.*, the bird sings.
(*b.*) The *attributive*; *e.g.*, the singing bird.
(*c.*) The *objective*; *e.g.*, drink water.

ACCENTUATION.

§ 17. Accentuation denotes in a special manner that every sentence expresses only one thought, and every sentential relation, only one notion, while it represents in every sentence, and in every sentence-relation, the subordination of the notions by the subordination of the accent. (§ 16.)

For example, in the sentence, "The mouth of the just brings wisdom," we know that all members of the entire sentence are in stress subordinated to the one word *wisdom*; that the entire sentence expresses only one thought, and that *wisdom* (to bring wisdom) is the principal notion of the whole thought. We know, further, that in the sentence-relations "the mouth of the just," and "brings wisdom," one member of the sentence-relation, (in the first "of the just," and in the second "wisdom,") is, by the accent, made prominent; that each of these sentence-relations expresses properly only one notion; and that in the first "*of the just*," and in the last, "*wisdom*," is the principal notion of the sentence-relation.

Remark.—Without accent we could not distinguish *black-bird* from *black bird*, *bluebell* from *blue bell*.*

In like manner, the accent in every polysyllabic word shows that the word expresses only one notion, while the termination, which expresses either the *notion-form* (§ 3,) or the *relation* (§ 13,) is subordinated by the accent to the *stem*, which expresses the notion itself.

In the offshoots sing-er, found-ling, and in the inflected words prais-ed, hous-es, hard-est, we perceive, by the accent, that they express only *one* notion, and that in the first the notion form expressed by *er* and *ling*, and in the last the relation expressed by *ed*, *es*, and *est*, is subordinated to the notion.

Remark.—By means of accent, we learn that several syllables, *e.g.*, thank-ful-ness, stitute *one* word, and not several words.

Accent denotes, finally, in the union of a notion-word with a form-word that both taken together express only one notion, while the form-word, which expresses the *relation* of the notion, is, by the accent, subordinated to the notion-word. (§ 13.)

Ex.—In the *summer*, in the *morning*. My *aim* was *good*.

Remark.—We call the value of a word in a sentence, in so far as it is marked by the accent as *super-ordinate*, or *subordinate*, its *logical value*; and we say, for example, that the principle word has a greater logical value than other members of the sentence, and the notion-word a greater logical value than the form word.

LAWS OF ACCENTUATION.

§ 18. The *principal* and *subordinate* notions in sentence-relations, and the *notion* and its *form* (§ 3,) or *relation* (§ 17) in words, are distinguished in speech by the contrast between a stronger accent, called the principal

* See Latham's "English Language," § 238, Chapter xxxi.—Tr.

accent, and a weaker accent, called the subordinate. This contrast appears in the following laws:

1. In the sentence, and in the sentence-relations, the principal word has the principal accent, and the subordinate member, the subordinate accent.

Remark.—The attribute alone, if expressed by an adjective, has commonly the subordinate accent; *e.g.*, an old house.

2. In polysyllabic words the stem has the principal accent, and the endings the subordinate.

3. In every union of a notion-word with a form-word, the notion-word has the principal, and the form-word the subordinate accent.

DIFFERENCES IN ACCENT.

§ 19. All endings and form-words have, indeed, the subordinate accent, but some of them have a stronger, and others a weaker accent. We distinguish therefore, in the accentuation of notion-words, and their union with form-words, *three degrees*, to wit:

(*a.*) The *full-toned* notion-words and stems.

(*b.*) *Half-toned* endings and form-words, as thank-*ful*, *can* jump, *from* fear.

(*c.*) *Toneless* endings and form-words, as might-*y*, *the* dog, etc.

Toneless are the endings of derivation and declension: *half-toned* are the form-words, except

(*a.*) *Personal pronouns* and the *article*. (§ 10.)

(*b.*) Monosyllabic forms of the verb *to be*.

(*c.*) Some prefixes, as *be*,—*be*-speak, etc.

(*d.*) The preposition *to* in the infinitive; as *to* say.

If a form-word has, by inflection or derivation, assumed an ending, then the stem is halftoned and the ending toneless.

If notion-words become endings or form-words, then the changed tone relation is often followed by a changed vocal relation: one vowel is changed into an other, *e.g.*, neighbor (*neah-bur*), or a long vowel loses its length.

GRAMMATICAL AND RHETORICAL ACCENT.

§ 20. Since the accentuation corresponding to the above named laws (§ 18) denotes the *grammatical* relation of words to one another, and of the stem and ending in every word, it is called the grammatical accentuation, and the principal accent lying upon a syllable, according to those laws, is called the *grammatical accent*.

From this grammatical accent must be distinguished the *rhetorical* accent, *i.e.*, that accent which the speaker lays, as principal accent, upon this or that word, or ending, even, according as it is his purpose to make especially prominent, by a contrast, this or that notion, or relation.

Ex.—The *child* (not the mother) sleeps. He *will* come (has not yet come). A shepherd-*ess* (no: a shepherd).

RHYTHM.

§ 21. We call the tone-relation in a word and in a sentence-relation, the *rhythm* of the word and sentence relation.

A *word* has a good rhythm, if the *unity* of the notion is represented in *one* principal accent, as well as the *subordination* of notion and relation, in a *harmonious relation* between principal and subordinate accent.

A *sentence-relation* has a good rhythm in like circumstances.

A perfectly rhythmical relation of accent assists the comprehension of speech, and pleases at once the ear and mind of the hearer. The right proportion of accent is called the *euphony* of speech.

The most perfect rhythm of the word is presented in full toned stems which have only one ending, or prefix, or both these. Since, however, two syllables with subordinate accent are, in a manner, equal to one full toned stem, stems with two endings have also a good rhythm.

Words with more than two endings have a defective rhythm, and are called *afterforms*.

Unions of a notion-word with a great number of form-words, are, in respect to to rhythm, also defective.

Defective rhythm is often improved by contracting two endings or form-words, by means of dropping a short vowel.

A whole sentence-relation is very often changed into *one* word, that the unity of the notion may be more perfectly exhibited in a rhythmical unity of expression.

(*a.*) The members of the sentence-relation are contracted into one word in composition, as a sleigh-ride, a ride in a sleigh.

(*b.*) The relational word is denoted only by a termination of the principal word, as he fish-es, he catches fish.

(*c.*) The relational word is absolutely omitted. This omission is called an *ellipsis*; as, Good night! Forward!

Remark.—In proverbs especially is the verb only omitted; *e.g.*, "Great cry and little wool." "Better late than never."

IDIOM.

§ 22. The peculiar manner in which the English language denotes the relations of notions in speech by inflection, form-words and composition, by the arrangement of words, and especially by the rhythmical form of expression, is called the *idiom* of the English language.

The purity of the idiom deserves as much attention as the purity of the vocabulary, and perhaps more.

DIVISION OF GRAMMAR.

§ 23. *Grammar* is the *doctrine* of *speech*. It examines the sentence, and unfolds the relations of the sentence and its members. Although the word has a signification only in the sentence, yet, for the sake of greater clearness in representation, grammar separates the word and the word-

form from the forms of the sentence and sentence-relations, and in *etymology* examines words as members of a sentence *set free*, as it were, and in *syntax* examines the modes of expression, by which words, as members of the living language, are united in sentence relations and sentences.

It separates further in etymology the examination of the formation of words, *i.e.*, the formation of notion-words by derivation, from the examination of the different *parts of speech* and their inflection; and in syntax, the examination of the particular *sentence-relations* from the examination of the *arrangement of words* corresponding to each sentence-relation.

Orthography is to be looked upon as a supplementary part of grammar

THE TRUE ORDER OF STUDIES.

BY REV. THOS. HILL, WALTHAM, MASS.

(*Continued from the October Number.*)

At the same time that the child is expanding his powers of geometrical conception,—that is, from the age of six or eight to that of eleven or twelve, according to his ability,—he should also be gaining simple ideas of numbers. And, in doing this, he should follow the order of nature, and begin with concrete numbers, such as beans, corn, balls, or counters. Beans are, on the whole, the cheapest and cleanest. They should not be employed in a niggardly way. Let the child see heaps of ten, heaps of a hundred, and heaps of a thousand. He should not be accustomed to use the names of numbers in counting, without gaining by sight a just conception of the meaning, which he cannot do from the petty number of balls upon an ordinary abacus. Not that the pupil is to be principally occupied with large numbers. On the contrary, he will find in numbers under thirty occupation for many a series of most interesting and instructive experiments with beans. Give him, for instance, 29 beans, and bid him divide them into any number of equal heaps that he can. When he has found that his task is impossible, take away one bean, and let him find that 28 may be divided either in four sevens or seven fours. Then add two, and let him discover that 30 may be divided into six fives or five sixes; two fifteens or fifteen twos; two groups of three fives, or two groups of five threes; three groups of five twos, or three groups of two fives, and so on. Thus alone can a clear knowledge be given of the act-

ual difference between a prime and a composite number. Nor is this the simplest example. Begin with two beans,—teach the child to recognize it as a couple, as two, in whatever position. Add one,—teach him to recognize it as a triplet, as three, in whatever position. Show him that $2+1=3$, and $3-1=2$, $3\ \ 2=1$. Add another bean. Show him that it can be divided into two couples. Show him that $3+1=4$, $2+2=4$, $4-1=3$, $4-2=2$, $2\times2=4$. Add another bean; it is no longer divisible into equal parts; drill him on recognizing five as a quintette,—as five, in whatever position they are placed, and on the addition and subtraction of its parts. Take up six,—lead him to divide it into three couples, or into two triplets. Explain by the beans the two meanings of dividing six by three,—that is, of either separating it into three equal parts, or of separating it into equal parts, each of which consists of three. Show the identity of 3×2, and 2×3, each equalling 6. Proceed in this way with all the numbers, and you will not find many months pass before the pupil will recognize a dozen as a dozen, at a glance, and before he will unravel the various combinations of groups, similarly constituted, into which 24 beans may be a ranged, such, for instance, as two groups each of three couples of twos.

The teacher of the common school may object that he has no time for such an exercise. He should then make it, by omitting the more difficult and abstract studies to which a pupil of this age is sometimes condemned. The quickness of perception given by the exercise of counting small parcels of beans, under twenty, at a glance, is more valuable to a child of that age, than the intellectual discipline of mental arithmetic. In nearly every school in New-England, a disproportionate amount of time is given to arithmetic. The science is taught backward, beginning with reasoning, instead of with observation, and is hampered, also, with factitious difficulties, produced by a variety of unessential names and processes.

When, by means of the beans, the idea of numbers has been made familiar, as well as their names, the pupil should take up written arithmetic; this may, perhaps, be at the age of eight or ten. The decimal notation is to be taught, and, by means of a thousand or so of beans, rendered intelligible and impressive. For decimal fractions, which should be taught (as in Pliny E. Chase's treatise) at the commencement of exercises on the slate, break up two or three dry beans into small pieces, from which select ten that are nearly one tenth each, and also some of the finer powder, which may represent hundredths. When the pupil thus perceives that the decimal scale is capable of representing the infinitesimal as well as the infinite, let him also be made familiar with the fact that the unit is, in general, an arbitrary standard, and that the same

quantity of beans may, by removing the decimal point, be represented as so many tens, or hundreds, tenths, or hundredths.

After the pupil has made himself complete master of the four fundamental rules (including long division, in decimals), and of the principal characteristics of prime and composite numbers, let him take up mental arithmetic, and be kept at it until he is complete master of Warren Colburn's first lessons. This may not, however, be accomplished before he has, at the same time, made himself a proficient in all the ordinary operations of arithmetic. In the choice of a treatise upon this science, we have given a decided preference to Pliny E. Chase's over all others, because of its simplicity, and because of the immense number of its examples—which two qualities render the learner expert in figures in a much shorter time than is usually given to this study. The whole subject is usually introduced to the child's mind too early, and he is kept at it to too late a period in his education.

By the time that the pupil has mastered his ordinary arithmetic he will be ready to return to geometry, and take a simple course of instruction in geometrical demonstrations, and in the application of geometry to practical use. The great master of antiquity has left in his "Elements" a model of the reasoning art, but it is not in a form best calculated for young minds. The process of analysis naturally precedes synthesis, and must necessarily precede it in the mind of one who would demonstrate a new proposition; hence, a text-book ought to give more examples of analysis than of synthesis. Moreover, the object of a geometrical demonstration is not simply to prove the theorem demonstrated, but also to impart to the pupil the power of demonstration; for which reason a text-book ought to be interspersed abundantly with undemonstrated propositions and unsolved problems, as is the case in works on arithmetic and algebra. If no such text-book is readily accessible, the teacher should select, from books not in the scholar's hands, theorems allied to those which the scholar is studying, and propose their solution as an exercise for the class.

When the pupil has made some progress in geometrical demonstration, say at the age of thirteen to fifteen, he should be taught the use of logarithms. Only a few weeks' practice will be required to give him ease and rapidity in the use of this "wonderful rule," this marvellous "new instrument" of the seventeenth century. Logarithmic tables, while in all the more difficult calculations of astronomy, geology, and civil engineering, they are an indispensable aid, are very seldom resorted to in other cases where arithmetical results are required. Yet, as there is nothing whatever difficult in their practical application, and a facility in using them once acquired is not easily lost, there seems no reason why they

should not be found in every counting-room, and used as occasion requires.

The scholar should also at this age begin to acquaint himself with algebra. With the mathematical preparation which we have now recommended, the ordinary processes of algebra will present few difficulties; and in one or two years the scholar will find the solution of equations of the first and second degree, and approximation to higher roots, by means of derivatives, a familiar and easy task.

A short and simple course of trigonometry, and a very elementary course of perspective, and of descriptive geometry in general, will finish a high-school course of mathematics.

The college course will vary according as the system of instruction embraces or omits voluntary studies. Our whole scheme of instruction is based upon the idea that every human being needs education in the five branches of the hierarchy, and in each of the great divisions of that branch. The amount of study in each branch will depend, in part, upon the capacity of the scholar. We have endeavored to lay down a scheme extended enough to satisfy all except rare instances of extraordinary talent, and yet simple enough to be within reach of a fair proportion of our children. From our observation of the public schools of our own town, we should say that twelve or fifteen per cent. of the children in New-England can, without any over-exertion, go through all that we have here laid down.

In the tabular view given in our former article, we have placed the rythm of verse and music among the early incidental studies of algebra. The connection between algebra and the science of time is not so obvious as that between geometry and the science of space, and this is not the place to introduce any discussion of the reality of the connection. But is the opinion of some of the highest mathematical authorities of our day, that even the idea of number involves obscurely the idea of time as well as of space; and that the laws of algebra are primarily the laws of progression in time,—that they are rather illustrated than fulfilled by geometrical forms. If this be so, the cultivation of an ear for rythm, the custom of beating time to music, and of attending to the balancing of musical phrases, will facilitate the subsequent conception of equations and of their transformations, as surely as the attention to forms, and the attempt to draw outlines, will facilitate the subsequent study of geometry. It may be objected to this statement, that the best draughtsmen are sometimes notoriously deficient in mathematical power—the best musicians notoriously ignorant of algebra. It must be conceded that space and time seem capable of being approached and handled from

entirely opposite points of view, and that art and science flow, as it were, from opposite poles of the mental battery. But we are persuaded that there is not a real antagonism between them, and that the apparent conflict comes merely from the limited capacity of the human mind, in which close attention to one mode of viewing an object usually excludes all other modes. In souls of a larger growth there is found to be no incompatibility, and Art and Science are helpers of each other; Geometry and Optics justifying and sustaining Sculpture and Painting, and they in turn giving new interest and delight to those sciences; while Music and Poetry hold a similar, although more obscure, relation to Algebra.

We have treated of the mathematics, in the present article, as though they were isolated subjects; but the remarks which we have made concerning their relation to art warn us that we must never forget the intimate blending of all themes of thought into one great universe of truth. The five branches of the hierarchy are all indispensable, and are all so interwoven that one is well taught only as it is perceived to lie in harmonious connection with the others. For this reason the teacher of mathematics should be prepared, during the whole of the course of instruction, to point out to the pupil the bonds that link his subject with the physical world, with the laws of astronomy, chemistry, botany and zoölogy; with the history of man, of his speculation, and of his action, with mechanical inventions, with art, and with commerce; with the nature of man, capable of apprehending the mathematical thoughts that have guided the Creator of the world in the formation of all things; with the nature of that Being who has made all contained in space, or evolved in time, and subjected them to laws which are a source of such instructive and delightful investigation for his children to pursue, and which, in the forms and appearances they produce, awaken also such manifold sources of pleasure in the beauty and harmony of His works.

The principal views which we have endeavored to present in this article may be summed up in three sentences: that geometry should precede arithmetic in the training of a child's mathematical powers,—that in each of these two studies concrete forms should precede abstract language, observation and conception precede reasoning,—and that the cultivation of the power of definite conception by geometry is as truly valuable as the cultivation of the logical power. We cannot agree with the opinion that arithmetic is of more practical utility than geometry; yet, if we were of that opinion, we should still teach our children geometry first, arithmetic afterwards. For a change of occupation is rest, and the boy, who begins with geometry and leaves arithmetic to a later period, develops his powers is a more natural order, achieves his task with less fatigue

and, at the age of fifteen, not only knows more of other things, but more of arithmetic, also, than he could have known had his taste for numerical computation been destroyed by a premature and too continuous application to that science.

In our next article we propose to consider the proper mode of introducing the young to Natural History.

To be Continued.

Superintendent's Department

OPINIONS, &C., FROM THE OFFICE OF THE STATE SUPERINTENDENT.

(*Continued from the July Number.*)

Q. Have the Board, the teacher or the town or city superintendent the authority to expel a pupil from school for want of punctuality?

A. In regard to the powers of superintendents, and the duties of teachers, in the absence of positive statute, custom and precedent have established a *quasi* law. The teacher has control of the scholars only during school hours and while in the school house, or grounds. Out of school hours, and at home, parents have, as they ought to have, full and free control; nor does the act of attending school on the part of the child divert or lessen parental authority. The School Board may establish certain regulations for the management and government of the school, as provided for by law. For instance: they may prescribe certain text-books, and teachers are not obliged to hear scholars recite in any other; or they may prescribe certain duties, such as writing compositions or declamation, and a persistent refusal on the part of a pupil to comply, would, undoubtedly be a sufficient cause for a suspension from the privileges of the school until the rule was complied with. Or, for continued misbehavior, the Board may peremptorily expel a scholar until obedience is promised, and good behavior guaranteed. The constitution says that the common schools shall forever be free to all children, etc. The Declaration of Independence also classes liberty among the inalienable rights of men. But a man, by his own criminal action, may forfeit his liberty. And so a child by his own continued misbehavior, may forfeit the right, secured to him by the Constitution of our State, of attending school. The right, then, to suspend or to expel for a time, is clearly within the province of the school board. But

this power cannot be delegated by the Board to the teacher; nor can the town or city Superintendent, except in case a local law gives him the authority, take this matter into his own hands.

Whether tardiness is a sufficient reason for expulsion, or not must be determined by circumstances Punctuality of attendance is a great desideratum; but this, like all else in education, must be maintained rather by persuasion than by force. But, although punctuality is thus one of the necessities of a good school, it cannot be that, for an absence required or permitted by a parent, the teacher or School Board can, as a punishment for such absence, peremptorily refuse admission to the absentee. If a parent keeps his child at home one term, can the School Board refuse the child admittance the next? Or, if the parent keeps his child at home for one day, can the School Board refuse admission the next? Thus whenever absence is the result of obedience to parental authority (command or permission), the authority of the School Board should not inflict a punishment. If punishment is merited, it is by the parent. In case the absence is so long continued as to interfere with the good order of the school and the progress of those who are punctual, a more severe course may be necessary to prevent its recurrence. But, in all cases, it should make a difference whether parental authority sanctioned the absence We would, therefore, answer the question by saying that the Board cannot *expel* a scholar for tardiness, but that they may suspend him for a short period when such absence partakes of a criminal character.

Q. If districts, in ignorance of the law, at their annual meeting in 1858, elected their officers all for one year, how long will they hold their offices?

A. The officers elected at the annual meeting in 1858 will all hold their offices as provided in Section 16 of the School Law, whether such was the intention or not In cases where there is any dissatisfaction, it would be advisable for all officers thus elected to resign, that the election may proceed with full cognizance of the law.

Q. In case of an election at a first meeting, how long will the officers hold their offices?

A The same as though they were elected at the previous annual meeting. Section 16 of the School Law provides "that at the first annual election of district officers after the passage of this act, and at the *first election* [not the "first annual election,"] of such officers in any newly organized district, the clerk shall be chosen for one year, the treasurer for two years, and the director for three years" Thus, in case of an electionat a first meeting, the time between that and the annual meeting must be taken as one full year.

S. H. CARPENTER,
Assistant State Superintendent.

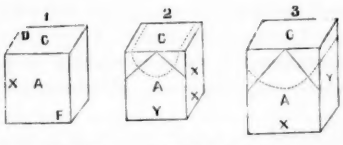
Mathematical Department.

EDITOR JOURNAL:—I am desirous of eliciting from some one or more of your scientific readers, information as to a disputed point respecting gravitation; and, with such view, submit the annexed problems, in the hope that some formula and process of procedure to obtain true answers may be supplied.

The writer is well aware that it is a conceded point that matter gains in weight by an approach toward the poles, but doubts the sufficiency of the reasoning as to the cause, and submits a proposition in refutation:

Proposition:—That if attraction of gravitation is toward the center of a mass; that the force of such gravitation will vary the surface of any mass, not a perfect sphere; and that such variation will be modified by the extent of lateral attraction, and distance from the centers of attraction. Also, that a lateral attraction of 45° will reduce the attraction of gravitation (downward) the one half.

PROBLEMS.



No. 1.—A cube with side *X*. At which point will attraction be greater, from *C* downward through center *A*, or from *D* downward through center *A* to corner *F*—*D* perpendicular to *F*: whether the attraction will be greater in

No. 2.—Breadth and depth *X*, length *Y*, from *C* downward; or in

No. 3.—Length of sides *X*, depth *Y*, from *C* downward.

If a satisfactory demonstration is supplied, then,

Question.—At what point on the earth's surface will matter have the greatest weight, at the Poles, or at the Equator? Centrifugal force not to be considered. The equatorial diameter being 26 miles greater than the polar.

N. B.—In "Another solution to Problem 12," in the March No., there seems to be a typographical error.

$3x^2+3x=1,$

$x=0,\ 26{,}376,$ Reads $3x^2+x=1.$

A READER.

Problem No. 33.—I have a garden in the form of an equilateral triangle, whose sides are each 200 feet. On each corner stands a tower, whose heights are respectively 30, 40, and 50 feet. What is the length of a ladder that will just reach the top of each tower, and how far is it from the foot of the ladder to the base of each tower? J. C. D.

Editorial Miscellany.

ABSENCE from our office attending Teachers' Institutes, and a severe attack of inflammation of the eyes, which, for more than two weeks, frustrated all attempts to read or write, must be our apology for the lack of variety in our editorial columns, and for the delay in issuing the present number.

TEACHERS' INSTITUTES.—The Institutes held under the direction of Chancellor Barnard during the past month, have been very successful, and will do much in arousing public attention and securing union of effort in the work of improving the condition of our schools, and the qualifications of teachers. The attendance in most cases was large, exceeding the anticipations of the most sanguine, and the exercises were characterised by earnestness and good feeling. Chancellor Barnard was present at most of the Institutes, lecturing upon topics relating to a system of public instruction adapted to the wants of our people, and exercising a general supervision over each.

Messrs. F. A. and C. H Allen, of Pennsylvania, and Mr. John Ogden, of Ohio, were engaged by Dr. Barnard to take charge of the Institutes and conduct the daily exercises, and they have shown themselves well qualified for the performance of the duties devolving upon them, as the success which attended their labors and the hearty approbation of the teachers benefitted by their instructions abundantly testify. At Elkhorn the lady teachers presented Messrs. F. A. Allen and Ogden a set of silver forks as a token of their gratitude and esteem, and at Waupun the ladies presented the same gentlemen a well filled purse as a partial return for benefits received, and the resolutions passed at Sheboygan and other places where institutes were held by Mr. C. H. Allen, show that his labors were highly appreciated by the teachers and citizens in attendance. Mr. C. E. Hovey, principal of the Illinois State Normal School, had charge of the Institute held at Mineral Point, and the complete success which followed his efforts proved his fitness for the responsible post he occupies in our sister State. It is proper to state that the gentlemen mentioned were assisted by prominent teachers of each locality where

the Institutes were held, but we will not make particular mention of their names in this connection, as we propose in the next number of the Journal to give a complete history of the whole series of Institutes, and we will only add that the success of this agency is one of the first fruits of the policy which secured the services of such a man as Dr Barnard as the agent of the Board of Normal Regents, and the hearty cooperation of the whole people in the good work, augurs well for the building up in the future of a complete system of public instruction in our State which shall comprise within itself all the means and agencies necessary to secure the education of our children.

WRITE FOR THE JOURNAL.—We often receive communications enquiring whether we wish or expect others besides the Board of Editors to furnish articles for the Journal. To save the trouble of a separate reply in each case, we re-state what we have often stated before, that we are glad to receive articles from any one who desires, or who is willing to furnish them, as we wish to make the Journal a record of the widest experience and best thought on the subjects of which it treats It is the organ of the teachers of the State, and we look to them to make it what it ought to be, as the exponent of educational progress, and a leader in educational reform in this commonwealth

NEW EXCHANGES.—We have received No. 1. Vol. 1, of the *Iowa Instructor*, published by the Iowa State Teachers' Association. It is a neat looking, well printed journal, containing thirty two pages and promises to do good service in the cause of education and progress. Published at Davenport at one dollar per year, but subscriptions should be sent to C. C. Nestlerode, Tipton Iowa We trust that the teachers across the river will see that it is well sustained

We have also received Nos. 1 and 2, Vol. 1, of the *Practical Machinist*, published by H. Leavitt & Co., 37 Park Row New York, at $1 per annum. 80 cents to clubs of 10, 75 cents to clubs of 20. It is a four column quarto, devoted to the interests of mechanics and inventors, gives descriptions of improvements in machinery, and new inventions, with copious illustrations It contains articles on the principles of machinery, on the patent laws, a weekly list of patents issued, and a large amount of valuable information in relation to steam, gas, coal, and their use for propelling machinery, lighting buildings, boats, cars, etc. We recommend it to machinists, engineers, and also hers who desire information in regard to the important topics of which it treats.

ATLANTIC MONTHLY —Our readers will be glad to learn that the death of the senior partner, and the financial embarrassments of the firm of Phillips Sampson & Co., will not interfere with the publication of this sterling magazine. It will be continued with all the essential features which now characterize it as the ablest serial in the country. The November number has not yet reached us, but the October number is a very interesting one, containing articles from some of the best writers of the day on a variety of topics, in prose and verse. Mrs. Stowe's new story, "The Ministers Wooing," approaches completion, and the denouement is anxiously looked for by thousands of interested readers. We think it will

prove to be her best work, and if it does not rival "Uncle Tom's Cabin" in popularity, it equals it in its graphic portrayal of life scenes, and its deep insight into human character Next month we shall give the prospectus for the new volume.

THE LADIES' HOME MAGAZINE for November is on our table and is filled, as usual, with well written articles of a high moral tone, calculated to interest and instruct its readers

THE GREAT REPUBLIC MONTHLY for October is fully equrl to the previous numbers It contains several well written articles, among which we notice one on The Gulf Stream and Currents of the Sea, by Prof. Maury; A Biographical sketch of Thomas Grimke, and Clairvoyance and Imagination; The Asinine Papers, Vagaries of an Artist, and The Wildthorn Manuscripts, are continued. There are several other pieces in prose and verse. The publishers promise increased attractions in the next volume, which commences with January. 1860, and we think it richly worth the subscription price.

THE AMERICAN MERCHANT for October is embellished with a fine likeness of Wm. Cullen Bryant accompanied by a biographical sketch. It contains articles on The Credit System, and Cotton and its Culture, besides the usual variety in the Nautical, Law, Mercantile, Educational Commercial and Editorial departments. It is a valuable compend of important information in relation to the pursuits and business of practical life, and is worth many times its cost to every man, no matter what his employment or profession Published by Bryant & Stratton, 18 Cooper Institute New-York city.

THE BOYS AND GIRLS OWN MAGAZINE.—Volume 1 of this periodical closes with the December number, and we recommend our young friends to subscribe for Vol. 2, as we are sure they will find much in it to interest and instruct them. Terms 75 cents a year. Published monthly by Wm. L. Jones, 152 6th Avenue, New York.

OUR old friend The Student and Schoolmate, which we had lost sight of for a long time, has again made its appearance, united with Forrester's Boys' and Girls' Magazine. It is one of the best of our juvenile exchanges, and we are always glad to see its pleasant face It is an excellent reader for schools, and contains original dialogues and pieces suitable for declamation. Published monthly at $1 per year by James Robinson & Co. 120 Washington St., Boston, and N A. Calkins, 348 Broadway, New-York.

WE would remind teachers who have not attended either of the Institutes appointed by the Agent of the Normal Regents for October, not to fail in being present at one or more of the four which are to be held in November—viz:

" Milton,	commencing	Monday	evening,	November	7th.
" Kenosha	"	"	"	"	7th.
" Beloit,	"	"	"	"	14th.
" Madison,	"	"	"	"	21st.

MADISON.—The autumn term of the State University has opened with a large number of pupils than in any previous year. Chancellor Barnard has made an arrangement with the Board of Education for the instruction of pupils belonging to the Preparatory Department of the University, in the Public High School of Madison—the Board providing for the High School enlarged and improved facilities of school room and teachers, and at the same time inviting the cooperation of Chancellor Barnard with their own Superintendent in the affairs of the school. Arrangements have also been made for religious services on every Sunday afternoon, by Prof. Butler, in the Chapel of the University, for the Faculty and students. The Scientific Course will be greatly enlarged by the opening of another term; and it is expected that a Normal Department will be opened in connection with the Normal Class of the High School, giving better facilities for the professional training of teachers that has yet been enjoyed in Wisconsin.

The Public High School of Madison has been provided with better schoolroom and class rooms, in the building formerly occupied by the Female Seminary—the building having been enlarged for this purpose. Mr. Kilgore retires from the Principalship, and gives his whole time to the duties of superintendance of all the Public Schools. Mr. N. L. Gallup, formerly Principal of Central Public School of Hartford, Ct., and Prof. Conover, formerly of the State University, have been appointed Associate Principals, the former of the English, and the latter of the Classical Department. They are are assisted by Miss Burnam and Miss Newman, and by Mr. Pickart in the German language. Instruction will, it is hoped, be given in music, and gymnastic and calisthenic exercises. It is the intention of all concerned to make this a first class Public High School—equal to any Academy, or High School, or Preparatory Department in the State.

It is proposed, by a few public spirited citizens, to erect, under the auspices of Chancellor Barnard and Dr. D. B. Reid, (the new Professor in the department of practical Science in the State University), in a central position in Madison, a building devoted to the promotion of science among the whole population—in ways not provided for in any existing establishment. The following circular will explain the object:

"IT is proposed to erect, in a central position in Madison, a special building constructed with the resources and peculiarities introduced by Dr. D. B. Reid, and to devote it to the promotion of science among the whole population, whose wants have not been hitherto met by any existing institution, while it will add, at the same time, to the educational resources of existing establishments.

The illustration in this city of all that is most interesting in the progress of the Fine and Useful Arts, and of those industrial, sanitary and economic pursuits that are essentially connected with the education and comfort of the people, and the reunion of those engaged in the varied occupations of life, will form its leading and characteristic feature.

Select courses of lectures and illustrations can be given in it at stated periods and at other times individuals from all parts of the State, as well as from abroad

may be requested to lecture, or to explain and illustrate special subjects, in union with such regulations as may be adopted for this purpose.

It is considered that the construction of such a building, even though limited at first to one apartment, dedicated to lectures, experimental purposes, and a select series of practical operations, might be rendered not undeserving of the countenance of the legislature, of the university, and other public institutions All individuals, also, interested in education, in the improvement of the condition of the people, in the blending of the Fine and Useful Arts, and in affording facilities of illustration, investigation, and consultation in special arts and manufactures, will be invited to co-operate in this cause.

No fleeting nor temporary object being contemplated by the plan proposed, but one whose influence, it is believed, might soon be felt both in the city and in the State, it is deemed desirable that the final plan should depend on the result of the first year's trial, and that it should be fully explained and illustrated in a temporary structure that may be extended and rendered permanent, according to the support it receives.

It is proposed that the whole of the arrangements for the proceedings of the first year shall be under the direction of a Committee, to be appointed by those Gentlemen, who will agree to subscribe the necessary sum for the use of the ground and the erection of the building, provided an adequate sum for the expenses of the first year shall be received by subscription, or by tickets to the different courses, illustrations, and practical operations which will be conducted there during this period. HENRY BARNARD."

ERRATUM.—In Problem No. 32, in the October number, for "and *FAD* is double *FCD*," read "*FCD* is double *FAD*."

BOOK TABLE.

THE NORMAL, or methods of teaching the common branches, Orthoepy, Orthography, Grammar, Geography, Arithmetic, and Elocution; including the outlines, technicalities, explanations, demonstrations, definitions, and methods introductory and peculiar to each branch. By ALFRED HOLBROOK, Principal of Normal School, Lebanon, Ohio. New-York: A. S. Barnes & Burr. 51 and 53 John St. 1859.

This work commences with a classification of knowledge under the three departments of *Literature*, *Science*, and *Art*, accompanied by concise definitions of each division, branch, or topic, after which the several subjects mentioned on the title page are taked up in their order outlined, defined, and explained, and the author's methods of teaching them to primary and advanced classes clearly set forth. Prepared by an experienced and successful teacher and presenting an exposition of methods and plans elaborated in the school room, instead of the study, it is eminently a practical work, worth ten times its cost to the young teacher every year he is engaged in the school room, and furnishing for those of more experience definite outline of the studies pursued in schools, and many valuable suggestions in regard to methods of teaching. We heartily recommend the book to the profession, and trust that its merits will insure it an extended circulation

BOOK KEEPING, by Single and Double Entry, simplified and adapted to the use of Common Schools. By W. W. SMITH and EDWARD MARTIN. New-York: A. S. Barnes & Burr, 51 and 53 John St. 1859.

This is really a practical work and the usually difficult processes of Journalizing, Posting, etc., are so simplified and explained that any youth of average intellect can understand the whole matter, and become a good book keeper by studying its attractive pages. More attention ought to be given to this subject in our common schools, and this work is well calculated to make the study interesting and profitable.

THE SCIENCE OF EDUCATION, AND ART OF TEACHING; in two parts. By JOHN OGDEN, A. M. Cincinnati: Moore, Wilstach, Keyes & Co., 25 West Fourth St. 1859.

Part first of the above work is a forcible and philosophical exposition of the nature of man, and the true object of education, treating the subject under the following heads: Educational Capacity; Educational Forces; Educational Processes; Physical, Intellectual, Moral, and Religious Education. Part second is devoted to the consideration of school-room duties embracing the following topics: Study, Recitation, School business, Recreation, and Government. The work of a practical teacher, and close thinker, it is well calculated to convince its readers that there is such a thing as 'The Science of Education' founded upon immutable principles, and that the 'Art of Teaching" is worthy of a prominent place in the list of arts which benefit and bless mankind. Characterised by simplicity and clearness of style and a high moral tone it is worthy of a place on a front shelf in the teacher's library, and we are happy to know that many of our teachers have already secured it as an aid in the performance of their responsible duties.

THE UNIVERSAL SPEAKER, containing a collection of Speeches, Dialogues and Recitations adapted to the use Schools, Academies and social circles. Edited by N. A. CALKINS and W. T. ADAMS. Boston: Brown, Taggard & Chase, 25 and 29 Cornhill. 1859.

The increased attention given to the subject of declamation, and rhetorical exercises generally in our schools, has caused a supply of works of the character of the above, suited to the wants of pupils of every age and grade. We notice in this book an adaptation of the subjects and style of treating them, to the comprehension and capacity of those for whom it is designed and a variety of topics and exercises not often found in similar works. Part 2 was prepared by Prof. Wm. Russell the celebrated elocutionist, and presents the notation and style of delivery adopted by that successful teacher. The pieces, as a general rule, are entirely new and the editors have evinced judgment and good taste in their selections. The mechanical execution of the book is excellent, and its attractive appearance, as well as genuine merit commends it to the favorable consideration of teachers and pupils.

A FAMILIAR COMPEND OF GEOLOGY, for the School and Family. By A. M. HILLSIDE. Philadelphia: James Challen & Son. 1859.

That the study of geology cannot be pursued to any considerable extent, particularly in our common schools, is evident at a glance; but that a knowledge of its elements and first principles is necessary to enable one to fully understand many of the allusions and illustrations in works on kindred topics or general literature, is also evident: and as the mass of our people obtain all the education they ever get in the common school, we believe that a work treating only of first principles and giving a general outline of the subject in simple language, as free as possible from technicalities and scientific terms, would supply a want hitherto unsupplied. This work seems to have been prepared with reference to that very object, and, so far as our limited acquaintance with the science enables us to judge, the author has successfully carried out the plan, and given a correct and interesting compend of the elements of Geology. The work is finely printed, and beautifully illustrated; has a copious glossary, and full index, and, in the hands of a live teacher, would serve a valuable purpose in opening to the youthful mind a few pages of the Book of Nature.